

INPUT SET: S14548.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

SEQUENCE LISTING

(1) General Information:

(i) APPLICANT: Inouye, Sumiko
Hsu, Mei-Yin
Eagle, Susan
Inouye, Masayo

(ii) TITLE OF INVENTION: Prokaryotic Reverse Transcriptase

(iii) NUMBER OF SEQUENCES: 45

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Weiser & Associates
(B) STREET: 230 South Fifteenth Street, Suite 500
(C) CITY: Philadelphia
(D) STATE: Pennsylvania
(E) COUNTRY: U.S.A.
(F) ZIP: 19102

(v) COMPUTER READABLE FORM:

- (A) MEDIUM TYPE: Floppy disk
- (B) COMPUTER: IBM PC compatible
- (C) OPERATING SYSTEM: PC-DOS/MS-DOS
- (D) SOFTWARE: PatentIn Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: US 08/269,118
(B) FILING DATE: 30-JUN-1994
(C) CLASSIFICATION:

(a)(6) ATTORNEY/AGENT INFORMATION:

(A) NAME: Weiser, Gerard J.
(B) REGISTRATION NUMBER: 19,763
(C) REFERENCE/DOCKET NUMBER: 377.5888P

THE COMMUNICATION INFORMATION

(3) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 2176 base pairs

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/269,118ADATE: 12/20/96
TIME: 16:22:21

INPUT SET: S14548.raw

47 (B) TYPE: nucleic acid
 48 (C) STRANDEDNESS: double
 49 (D) TOPOLOGY: linear

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51

52 (ix) FEATURE:
 53 (A) NAME/KEY: CDS
 54 (B) LOCATION: 640..2094

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57 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

| | | | | | | |
|--|------------|------------|---------------------|---------------------|------------|-----|
| 58 TCATCCGC | GGACACCCCC | TCCTACGTGC | CCCCCGACGC | GGAGAGCGGC | GTGGAGACGG | 60 |
| 59 TGTACCGCGT | TTCCCTGGAT | GGTCACCTGG | TGGCGGTGGA | GTGGGGCCCG | CGCACGGGCT | 120 |
| 60 CGCCCGCGTCA | CCAGCGGCTC | TGGTTCGACT | CGGATGCGGA | AGCCCCCGGA | GCCTACTTCG | 180 |
| 61 CGCGCCTCGA | GAAGTTGGCG | GCTGACGGCT | ACATCGACGC | GGCCTCGGCA | TTGGTCTAAA | 240 |
| 62 CCCTCAACC | ACGGCTCGGC | CGCCACGCGC | GGCCGGCAGG | ACAGGTGCGA | CGAACAGACG | 300 |
| 63 ACGACGTGCG | CTTCACGCC | GAGCAGCCGA | GAGAGGTCCG | GAGTGCATCA | GCCTGAGCGC | 360 |
| 64 CTCGAGCGGC | GGAGCGGGGT | TGCGCCGCTC | CGGTTGGAAT | GCAGGACACT | CTCCGCAAGG | 420 |
| 65 TAGCCTGTT | TTGGCTCTCT | CCCTCCTAGG | CACTACGGCC | AGGGTGGGTA | GCGGAGCAA | 480 |
| 66 CGACGCCACC | GCCGTTTACC | CACCCCGGCC | GTAGTGCCTA | GGAGGGGAGA | GCCGGTGAGG | 540 |
| 67 CTACCGTGCC | CCAGGTAAGA | TGGTGGTGCT | TTCCCGGCCT | CCGTCGACTG | CTCGCGCCAT | 600 |
| 68 GTCCCGTCTT | CCATCGCCGC | GCCCCCCC | GGTGCAGAC | ATG ACC GCC AGG CTG | | 654 |
| 69 Asp Pro Phe Val Pro Ala Ala Ser Pro Gln Ala Val Pro Thr Pro Glu | | | Met Thr Ala Arg Leu | | | |
| 70 10 | 15 | 20 | 1 | 5 | | |
| 71 GAC CCG TTC GTC CCC GCA GCT TCG CCG CAG GCC GTG CCC ACG CCC GAG | | | | | | 702 |
| 72 Asp Pro Phe Val Pro Ala Ala Ser Pro Gln Ala Val Pro Thr Pro Glu | | | | | | |
| 73 15 | 20 | | | | | |
| 74 CTC ACC GCT CCG TCG TCA GAC GCG GCC GCG AAG CGT GAA GCC CGC CGG | | | | | | 750 |
| 75 Leu Thr Ala Pro Ser Ser Asp Ala Ala Lys Arg Glu Ala Arg Arg | | | | | | |
| 76 25 | 30 | 35 | | | | |
| 77 CTC GCG CAC GAA GCG TTG CTC GTC CGC GCG AAG GCC ATC GAC GAA GCG | | | | | | 798 |
| 78 Leu Ala His Glu Ala Leu Leu Val Arg Ala Lys Ala Ile Asp Glu Ala | | | | | | |
| 79 40 | 45 | 50 | | | | |
| 80 GGC GGC GCC GAC TGG GTG CAG GCG CAG CTC GTC TCC AAG GGG CTC | | | | | | 846 |
| 81 Gly Gly Ala Asp Asp Trp Val Gln Ala Gln Leu Val Ser Lys Gly Leu | | | | | | |
| 82 55 | 60 | 65 | | | | |
| 83 GCG GTC GAG GAC CTG GAC TTC TCC AGC GCC TCC GAG AAG GAC AAG AAG | | | | | | 894 |

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/269,118ADATE: 12/20/96
TIME: 16:22:24

INPUT SET: S14S48.raw

| | | | | |
|-----|---|-----|-----|------|
| 100 | Ala Val Glu Asp Leu Asp Phe Ser Ser Ala Ser Glu Lys Asp Lys Lys | | | |
| 101 | 70 | 75 | 80 | 85 |
| 102 | | | | |
| 103 | GCC TGG AAG GAG AAG AAG GCG GAG GCC ACC GAG CGC CGC GCG CTG | | | 942 |
| 104 | Ala Trp Lys Glu Lys Lys Ala Glu Ala Thr Glu Arg Arg Ala Leu | | | |
| 105 | 90 | 95 | 100 | |
| 106 | | | | |
| 107 | AAG CGT CAG GCG CAC GAG GCG TGG AAG GCC ACG CAC GTG GGC CAC CTG | | | 990 |
| 108 | Lys Arg Gln Ala His Glu Ala Trp Lys Ala Thr His Val Gly His Leu | | | |
| 109 | 105 | 110 | 115 | |
| 110 | | | | |
| 111 | GGC GCG GGC GTG CAC TGG GCG GAG GAC CGC CTG GCC GAC GCG TTC GAC | | | 1038 |
| 112 | Gly Ala Gly Val His Trp Ala Glu Asp Arg Leu Ala Asp Ala Phe Asp | | | |
| 113 | 120 | 125 | 130 | |
| 114 | | | | |
| 115 | GTG CCC CAC CGC GAG GAG CGC GCG GCC CGG AAC GGC CTG ACG GAG CTG | | | 1086 |
| 116 | Val Pro His Arg Glu Glu Arg Ala Arg Ala Asn Gly Leu Thr Glu Leu | | | |
| 117 | 135 | 140 | 145 | |
| 118 | | | | |
| 119 | GAC TCC GCG GAG GCG CTG GCC AAG GCG CTG GGG CTG AGC GTC TCC AAG | | | 1134 |
| 120 | Asp Ser Ala Glu Ala Leu Ala Lys Ala Leu Gly Leu Ser Val Ser Lys | | | |
| 121 | 150 | 155 | 160 | 165 |
| 122 | | | | |
| 123 | CTC CGC TGG TTC GCG TTC CAC CGG GAG GTC GAC ACG GCC ACG CAC TAC | | | 1182 |
| 124 | Leu Arg Trp Phe Ala Phe His Arg Glu Val Asp Thr Ala Thr His Tyr | | | |
| 125 | 170 | 175 | 180 | |
| 126 | | | | |
| 127 | GTG AGC TGG ACC ATT CCG AAG CGG GAC GGC AGC AAG CGC ACG ATT ACG | | | 1230 |
| 128 | Val Ser Trp Thr Ile Pro Lys Arg Asp Gly Ser Lys Arg Thr Ile Thr | | | |
| 129 | 185 | 190 | 195 | |
| 130 | | | | |
| 131 | TCC CCC AAG CCT GAG CTG AAG GCA GCG CAG CGC TGG GTG CTG TCC AAC | | | 1278 |
| 132 | Ser Pro Lys Pro Glu Leu Lys Ala Ala Gln Arg Trp Val Leu Ser Asn | | | |
| 133 | 200 | 205 | 210 | |
| 134 | | | | |
| 135 | GTC GTG GAG CGG CTG CCG GTC CAC GGC GCC GCG CAC GGC TTC GTG GCG | | | 1326 |
| 136 | Val Val Glu Arg Leu Pro Val His Gly Ala Ala His Gly Phe Val Ala | | | |
| 137 | 215 | 220 | 225 | |
| 138 | | | | |
| 139 | GGA CGC TCC ATC CTC ACC AAC GCG CTG GCC CAC CAG GGC GCG GAC GTC | | | 1374 |
| 140 | Gly Arg Ser Ile Leu Thr Asn Ala Leu Ala His Gln Gly Ala Asp Val | | | |
| 141 | 230 | 235 | 240 | 245 |
| 142 | | | | |
| 143 | GTG GTC AAG GTG GAC CTC AAG GAC TTC TTC CCC TCC GTC ACC TGG CGC | | | 1422 |
| 144 | Val Val Lys Val Asp Leu Lys Asp Phe Phe Pro Ser Val Thr Trp Arg | | | |
| 145 | 250 | 255 | 260 | |
| 146 | | | | |
| 147 | CGG GTG AAG GGC CTG TTG CGC AAG GGC GGC CTG CGG GAG GGC ACG TCC | | | 1470 |
| 148 | Arg Val Lys Gly Leu Leu Arg Lys Gly Gly Leu Arg Glu Gly Thr Ser | | | |
| 149 | 265 | 270 | 275 | |
| 150 | | | | |
| 151 | ACG CTG CTG TCC CTC CTC ACG GAA GCG CCG CGG GAG GCG GTC CAG | | | 1518 |
| 152 | Thr Leu Leu Ser Leu Leu Ser Thr Glu Ala Pro Arg Glu Ala Val Gln | | | |

RAW SEQUENCE LISTING
PATENT APPLICATION: US/08/269,118ADATE: 12/20/96
TIME: 16:22:27

INPUT SET: S14548.raw

| 153 | 280 | 285 | 290 | |
|-----|--|-----|-----|------|
| 154 | | | | |
| 155 | TTC CGC GGC AAG CTC CTG CAC GTC GCC AAG GGC CCG CGC GCC CTG CCC | | | 1566 |
| 156 | Phe Arg Gly Lys Leu Leu His Val Ala Lys Gly Pro Arg Ala Leu Pro | | | |
| 157 | 295 | 300 | 305 | |
| 158 | | | | |
| 159 | CAG GGC GCC CCC ACG TCG CCC GGC ATC ACC AAC GCG CTC TGC CTG AAG | | | 1614 |
| 160 | Gln Gly Ala Pro Thr Ser Pro Gly Ile Thr Asn Ala Leu Cys Leu Lys | | | |
| 161 | 310 | 315 | 320 | 325 |
| 162 | | | | |
| 163 | CTC GAC AAG CGG CTG TCC GCC CTC GCG AAG CGG CTG GGC TTC ACC TAC | | | 1662 |
| 164 | Leu Asp Lys Arg Leu Ser Ala Leu Ala Lys Arg Leu Gly Phe Thr Tyr | | | |
| 165 | 330 | 335 | 340 | |
| 166 | | | | |
| 167 | ACG CGC TAC GCG GAC GAC CTG ACC TTC TCC TGG ACG AAG GCG AAG CAG | | | 1710 |
| 168 | Thr Arg Tyr Ala Asp Asp Leu Thr Phe Ser Trp Thr Lys Ala Lys Gln | | | |
| 169 | 345 | 350 | 355 | |
| 170 | | | | |
| 171 | CCC AAG CCG CGG CGG ACG CAG CGT CCC CCC GTC GCG GTC CTC CTG TCT | | | 1758 |
| 172 | Pro Lys Pro Arg Arg Thr Gln Arg Pro Pro Val Ala Val Leu Leu Ser | | | |
| 173 | 360 | 365 | 370 | |
| 174 | | | | |
| 175 | CGC GTC CAG GAA GTG GTG GAG GCG GAG GGC TTC CGC GTG CAC CCG GAC | | | 1806 |
| 176 | Arg Val Gln Glu Val Val Glu Ala Glu Gly Phe Arg Val His Pro Asp | | | |
| 177 | 375 | 380 | 385 | |
| 178 | | | | |
| 179 | AAG ACG CGC GTC GCC CGC AAG GGC ACG CGG CAG CGG GTC ACC GGG CTC | | | 1854 |
| 180 | Lys Thr Arg Val Ala Arg Lys Gly Thr Arg Gln Arg Val Thr Gly Leu | | | |
| 181 | 390 | 395 | 400 | 405 |
| 182 | | | | |
| 183 | GTC GTG AAT GCG GCG GGC AAG GAC GCG CCC GCG GCC CGA GTC CCG CGC | | | 1902 |
| 184 | Val Val Asn Ala Ala Gly Lys Asp Ala Pro Ala Ala Arg Val Pro Arg | | | |
| 185 | 410 | 415 | 420 | |
| 186 | | | | |
| 187 | GAC GTC GTC CGC CAG CTC CGC GCC GCC ATC CAC AAC CGG AAG AAG GGC | | | 1950 |
| 188 | Asp Val Val Arg Gln Leu Arg Ala Ala Ile His Asn Arg Lys Lys Gly | | | |
| 189 | 425 | 430 | 435 | |
| 190 | | | | |
| 191 | AAG CCG GGC CGC GAG GGC GAG TCG CTC GAG CAG CTC AAG GGC ATG GCC | | | 1998 |
| 192 | Lys Pro Gly Arg Glu Gly Ser Leu Glu Gln Leu Lys Gly Met Ala | | | |
| 193 | 440 | 445 | 450 | |
| 194 | | | | |
| 195 | GCC TTC ATC CAC ATG ACG GAC CCG GCC AAG GGC CGC GCC TTC CTG GCT | | | 2046 |
| 196 | Ala Phe Ile His Met Thr Asp Pro Ala Lys Gly Arg Ala Phe Leu Ala | | | |
| 197 | 455 | 460 | 465 | |
| 198 | | | | |
| 199 | CAG CTC ACG GAG CTC GAG TCC ACG GCG AGC GCC GCT CCG CAG GCG GAG | | | 2094 |
| 200 | Gln Leu Thr Glu Leu Glu Ser Thr Ala Ser Ala Ala Pro Gln Ala Glu | | | |
| 201 | 470 | 475 | 480 | 485 |
| 202 | | | | |
| 203 | TGACGCTCAG CGCGCGTCCG TCGCCGACGT GCGCGCGGCC AGCAACGCCG CATTCAAGCAA | | | 2154 |
| 204 | | | | |
| 205 | CTCCGTCAGC CGGCGCGGGT AC | | | 2176 |

INPUT SET: S14548.raw

206

207

208 (2) INFORMATION FOR SEQ ID NO:2:

209

210 (i) SEQUENCE CHARACTERISTICS:
211 (A) LENGTH: 263 amino acids
212 (B) TYPE: amino acid
213 (D) TOPOLOGY: linear

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215 (ii) MOLECULE TYPE: protein

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219 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

220

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|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| 221 Val | Lys | Leu | Lys | Pro | Gly | Met | Asp | Gly | Pro | Lys | Val | Lys | Gln | Trp | Pro | |
| 222 1 | | | | 5 | | | | | 10 | | | | | 15 | | |
| 223 | | | | | | | | | | | | | | | | |
| 224 Leu | Thr | Glu | Glu | Lys | Ile | Lys | Ala | Leu | Val | Glu | Ile | Cys | Thr | Glu | Met | |
| 225 | | | 20 | | | | | 25 | | | | | 30 | | | |
| 226 | | | | | | | | | | | | | | | | |
| 227 Glu | Lys | Glu | Gly | Lys | Ile | Ser | Lys | Ile | Gly | Pro | Glu | Asn | Pro | Tyr | Asn | |
| 228 | | | 35 | | | | 40 | | | | | 45 | | | | |
| 229 | | | | | | | | | | | | | | | | |
| 230 Thr | Pro | Val | Phe | Ala | Ile | Lys | Lys | Asp | Ser | Thr | Lys | Trp | Arg | Lys | | |
| 231 | | | | 50 | | | 55 | | | | 60 | | | | | |
| 232 | | | | | | | | | | | | | | | | |
| 233 Leu | Val | Asp | Phe | Arg | Glu | Leu | Asn | Lys | Arg | Thr | Gln | Asp | Phe | Trp | Glu | |
| 234 | | | | 65 | | | 70 | | | 75 | | | 80 | | | |
| 235 | | | | | | | | | | | | | | | | |
| 236 Val | Gln | Leu | Gly | Ile | Pro | His | Pro | Ala | Gly | Leu | Lys | Lys | Lys | Ser | | |
| 237 | | | | 85 | | | | | 90 | | | | 95 | | | |
| 238 | | | | | | | | | | | | | | | | |
| 239 Val | Thr | Val | Leu | Asp | Val | Gly | Asp | Ala | Tyr | Phe | Ser | Val | Pro | Leu | Asp | |
| 240 | | | | 100 | | | | | 105 | | | | 110 | | | |
| 241 | | | | | | | | | | | | | | | | |
| 242 Glu | Asp | Phe | Arg | Lys | Tyr | Thr | Ala | Phe | Thr | Ile | Pro | Ser | Ile | Asn | Asn | |
| 243 | | | | 115 | | | | 120 | | | | 125 | | | | |
| 244 | | | | | | | | | | | | | | | | |
| 245 Glu | Thr | Pro | Gly | Ile | Arg | Tyr | Gln | Tyr | Asn | Val | Leu | Pro | Gln | Gly | Trp | |
| 246 | | | | 130 | | | | 135 | | | | 140 | | | | |
| 247 | | | | | | | | | | | | | | | | |
| 248 Lys | Gly | Ser | Pro | Ala | Ile | Phe | Gln | Ser | Ser | Met | Thr | Lys | Ile | Leu | Glu | |
| 249 | | | | 145 | | | | 150 | | | | 155 | | | 160 | |
| 250 | | | | | | | | | | | | | | | | |
| 251 Pro | Phe | Lys | Lys | Gln | Asn | Pro | Asp | Ile | Val | Ile | Tyr | Gln | Tyr | Met | Asp | |
| 252 | | | | 165 | | | | | 170 | | | | 175 | | | |
| 253 | | | | | | | | | | | | | | | | |
| 254 Asp | Leu | Tyr | Val | Gly | Ser | Asp | Leu | Glu | Ile | Gly | Gln | His | Arg | Thr | Lys | |
| 255 | | | | 180 | | | | 185 | | | | 190 | | | | |
| 256 | | | | | | | | | | | | | | | | |
| 257 Ile | Glu | Glu | Leu | Arg | Gln | His | Leu | Leu | Arg | Trp | Gly | Leu | Thr | Thr | Pro | |
| 258 | | | | 195 | | | | 200 | | | | 205 | | | | |